

REMARKS

Claims 1, 2, 4, 6 and 7 have been amended, and claims 15-17 have been amended. No new matter has been added by virtue of the amendments and new claims. For instance, support for the amendment of claim 1 appears e.g. in the original claims of the application. Support for the new claims appears e.g. page 10, the examples and the original claims of the application.

Claims 1-8 were rejected under 35 U.S.C. 112, second paragraph.

It is believed the amendments made herein obviate the rejection. Specifically, “said catalyst depositing treatment” as noted at page 2 of the Office Action is now not recited in claim 1. Claim 2 has been amended to recite “the palladium”. “Derivatives” has been deleted from claim 4.

Withdrawal of the rejection is therefore requested.

Claims 1-5 and 8 were rejected under 35 U.S.C. 102 over Kiyota et al. (JP 2001-214278).

Independent claim 1 (the only pending independent claim) as amended herein recites subject matter of claims 6 and 7, which claims were not rejected under Section 102 over Kiyota et al.

In view thereof, reconsideration and withdrawal of the rejection are requested. See, for instance, *In re Marshall*, 198 USPQ at 346 (“[r]ejections under 35 U.S.C. 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art.”).

Claim 6 was rejected under 35 U.S.C. 103 over Kiyota et al. (JP 2001-214278).

Claim 7 was rejected under 35 U.S.C. 103 over Kiyota et al. (JP 2001-214278) in view of Shirota (U.S. Patent 6,331,239).

For the sake of brevity, these two Section 103 rejections are addressed in combination. Such a combined response is considered appropriate because *inter alia* each rejection relies on the Kiyota et al. document as the sole or primary citation.

Each of the rejections is traversed.

As discussed above, subject matter of claims 6 and 7 is now recited in independent claim 1.

As specifically exemplified by comparative data in the present application, use of a iodine and/or a water-soluble iodine compound or (b) hydantoin and/or a hydantoin derivative can provide notable advantages.

Thus, as discussed at page 11 of the present application, use of an iodine compound in the plating solution can provide an accelerated copper deposition rate. Such accelerated deposition rate is demonstrated in the examples of the application.

As also discussed at page 10 next to last paragraph of the application, and recited in new claim 16, the iodine compound can be present together with a distinct thallium compound.

As discussed at page 11-12 of the application, use of a hydantoin material in the plating solution also can provide an accelerated copper deposition rate. Such accelerated deposition rate is demonstrated in the examples of the application.

The examples also demonstrate superior results with use of a plating solution that contains both (a) a iodine and/or a water-soluble iodine compound and (b) hydantoin and/or a hydantoin derivative, as recited in new claim 17.

Kiyota et al. is cited for the mention of the single compound of thallium iodide in a list, although no compositions are exemplified having thallium iodide.

Clearly such a mention of a single compound does not suggest Applicants' presently claimed invention. Indeed, Kiyota et al. provides no mention of the surprising increase in copper deposition rate as provided by use of an iodine compound, as disclosed and specifically demonstrated in the present application.

The Shirota document is similarly deficient. The entire thrust of the Shirota document is to use of a saccharide compound. See the Abstract and examples of Shirota et al. No incentive would have existed to so carefully select a single possible material reported in Shirota et al. and insert that carefully selected single material into the Kiyota et al. composition, as proposed by the instant rejection.

Moreover, while Applicants fully believe that a *prima facie* case under Section 103 is presented by the cited documents, it is also submitted that any *prima facie* case that may be contended to exist is clearly rebutted by the comparative data of record.

In this regard, attention is directed to the examples at pages 21-51 of the application, including Table 13 on pages 43-44 of the application, were results of Examples 1-11 and Comparative Example 1 are summarized.

The cited documents also clearly do not teach other claimed aspects of Applicants' invention, such as where the plating solution comprises potassium iodide, ammonium iodide, or

an organic compound comprising covalent bound iodine as recited in claim 15, or where the plating solution comprises thallium iodide in combination with a distinct water-soluble iodine compound as recited in claim 16, or where the plating solution comprises (a) a iodine and/or a water-soluble iodine compound and (b) hydantoin and/or a hydantoin derivative as recited in claim 17.

In view thereof, reconsideration and withdrawal of the rejections are requested.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,



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